REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1 and 8-11 have been amended. Claim 12 has been added. Claims 1, 5-6, and 8-12 are pending and under consideration.

Applicants have timely filed a Request for Continued Examination (RCE) along with this Amendment, including the filing fee as set forth in 37 CFR 1.17(e). Accordingly, Applicants respectfully request that the Examiner withdraw the finality of any Office action and enter this Amendment for consideration under 37 CFR 1.114.

I. Claim Objections

In the Office Action, at page 3, numbered paragraph 5, claim 8 was objected to due to an informality. As per the Examiner's suggestion, claim 8 has been amended in response to this objection. Withdrawal of this objection is respectfully requested and, thus, it is submitted that claim 8 is in a condition suitable for allowance.

II. Rejections under 35 U.S.C. § 101

In the Office Action, at pages 3-4, numbered paragraphs 6-7, claim 9 was rejected under 35 U.S.C. § 101 for being directed to non-statutory subject matter because of the recited "computer readable storage embodying a method" in the preamble. As per the Examiner's suggestion, claim 9 has been amended to recite a "computer readable medium encoded with a computer program". Accordingly, withdrawal of the § 101 rejection is respectfully requested.

III. Rejections under 35 U.S.C. § 103

In the Office Action, at pages 4-8, numbered paragraphs 8-9, claims 1 and 9-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Padovani et al. (U.S. Patent Application Publication No. 2004/0196800 A1) in views of Yamamoto et al. (U.S. Patent Application Publication No. 2003/0109265 A1) and Yli-Kotila et al. (U.S. Patent No. 5,539,925).

None of Padovani et al., Yamamoto et al., or Yli-Kotila et al. discuss or suggest:

> a predetermined length of time before the change from a time period associated with said second period of time to a time period associated with said third period of time, said transceiver which is enabled to transmit and receive RF signals starts detection of an RF signal transmitted by a wireless terminal located in a corresponding sector, and broadcasts a packet indicative of disabling transmission between said transceiver and wireless

> terminals in said corresponding sector during said third period of time and indicative of a length of said third period of time to wireless terminals in said corresponding sector, during which said transceiver does not receive an RF signal, wherein said transceiver broadcasts said packet if said transceiver detects no transmitted RF signal, and wherein, if said transceiver detects a transmitted RF signal, then said transceiver broadcasts said packet after completion of transmission of the transmitted RF signal;
>
> and
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> a predetermined length of time before the change from a time period associated with said third period of time to a time period associated with said second period of time, said transceiver which is enabled to transmit and receive RF signals starts detection of an RF signal transmitted by a wireless terminal located in a corresponding sector, and broadcasts a packet indicative of disabling transmission between said transceiver and wireless terminals in said corresponding sector during said second period of time and indicative of a length of said second period of time to wireless terminals in said corresponding sector, during which said transceiver does not receive an RF signal, wherein said transceiver broadcasts said packet if said transceiver detects no transmitted RF signal, and wherein, if said transceiver detects a transmitted RF signal, then said transceiver broadcasts said packet after completion of transmission of the transmitted RF signal,

as recited in amended independent claim 1. In other words, the invention of claim 1 provides for detecting a carrier of an RF signal *before* broadcasting a packet for disabling transmission. Such carrier detection is provided for switching between the modes of communication, such that, in the enabled mode of communication, wireless terminals in a corresponding sector transmit packets in an *asynchronous* manner, and synchronous time slots are not used. In contrast, Padovani et al., Yamamoto et al., and Yli-Kotila et al. each disclose that data packets have fixed lengths and are transmitted *synchronously* with the time slots on forward and reverse links as controlled by the base station.

Furthermore, none of Padovani et al., Yamamoto et al., or Yli-Kotila et al. discuss or suggest:

> time periods associated with said second period of time and time periods associated with said third period of time are sequentially and alternately executed;
>
> and
>
> the communication control unit determines whether time periods associated with said second period of time and time periods associated with said third period of time have been sequentially

> and alternately executed a predetermined number of times and executes a time period associated with said first period of time based on said determination,

as recited in amended independent claim 1. In other words, the invention of claim 1 provides for alternating time periods in which transmission between base station transceivers and wireless terminals is enabled and disabled for non-adjacent sectors in the network. Furthermore, the communication control unit can be used to determine whether these alternating periods have been executed a predetermined number of times. As the predetermined number becomes larger, the frequency of occurrence of the mode of all-sector communication becomes lower, and, therefore, the efficiency of communication becomes higher. As such, the communication control unit is capable of determining the efficiency of the communication for the entire local area network. None of the prior art cited discloses these features of the invention of claim 1.

Since none of Padovani et al., Yamamoto et al., or Yli-Kotila et al. discuss or suggest all of the features of claim 1, claim 1 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

Since none of Padovani et al., Yamamoto et al., or Yli-Kotila et al. discuss or suggest

> a predetermined length of time before the change from a time period associated with said second period of time to a time period associated with said third period of time, said transceiver which is enabled to transmit and receive RF signals starts detection of an RF signal transmitted by a wireless terminal in a corresponding sector, and broadcasts a packet indicative of disabling transmission between said transceiver and wireless terminals in said corresponding sector during said third period of time and indicative of a length of said third period of time to wireless terminals in said corresponding sector, during which said transceiver does not receive an RF signal, wherein said transceiver broadcasts said packet if said transceiver detects no transmitted RF signal, and wherein, if said transceiver detects a transmitted RF signal, then said transceiver broadcasts said packet after completion of transmission of the transmitted RF signal;
>
> and
>
> a predetermined length of time before the change from a time period associated with said third period of time to a time period associated with said second period of time, said transceiver which is enabled to transmit and receive RF signals starts detection of a transmitted RF signal in a corresponding sector, and broadcasts a packet indicative of disabling transmission between said transceiver and wireless terminals in said corresponding sector during said second period of time and indicative of a length of said

second period of time to wireless terminals in said corresponding sector, during which said transceiver does not receive an RF signal, wherein said transceiver broadcasts said packet if said transceiver detects no transmitted RF signal, and wherein, if said transceiver detects a transmitted RF signal, then said transceiver broadcasts said packet after completion of transmission of the transmitted RF signal,

and

time periods associated with said second period of time and time periods associated with said third period of time are sequentially and alternately executed;

and

the communication control unit determines whether time periods associated with said second period of time and time periods associated with said third period of time have been sequentially and alternately executed a predetermined number of times and executes a time period associated with said first period of time based on said determination,

as recited in amended independent claims 9 and 10, claims 9 and 10 patentably distinguish over the references relied upon. Accordingly, withdrawal of these § 103(a) rejections is respectfully requested.

In the Office Action, at page 8, numbered paragraph 10, claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Padovani et al. in view of Yamamoto et al. or Yli-Kotila et al. and further in view of Pfeiffer et al. (U.S. Patent No. 4,672,656).

In the Office Action, at page 9, numbered paragraph 11, claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Padovani et al. in view of Yamamoto et al. or Yli-Kotila et al. and in further view of Kawai et al. (U.S. Patent Application Publication No. 2004/0163024).

Claims 5-6 depend from and include all the features of amended independent claim 1, plus additional features that are not discussed or suggested by the references relied upon. As discussed above, none of Padovani et al., Yamamoto et al., or Yli-Kotila et al. discuss or suggest all of the features of the invention of claim 1. Neither Pfeiffer et al. nor Kawai et al., or any combination thereof, makes up for the deficiencies in Padovani et al., Yamamoto et al., and Yli-Kotila et al. Therefore, claims 5-6 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of these § 103(a) rejections is respectfully requested.

In the Office Action, at pages 9-11, numbered paragraph 12, claims 8 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Padovani et al. in views of Reed (U.S. Patent No. 6,754,504) and Yli-Kotila et al.

Neither Padovani et al. nor Yli-Kotila et al. discuss or suggest:

> time periods associated with said second period of time and time periods associated with said third period of time are sequentially and alternately executed;
>
> and
>
> said control unit causes executes a time period associated with said first period of time based on whether time periods associated with said second period of time and time periods associated with said third period of time have been sequentially and alternately executed a predetermined number of times,

as recited in amended independent claim 8. Reed fails to make up for this deficiency. Specifically, Reed does not discuss or suggest

> time periods associated with said second period of time and time periods associated with said third period of time are sequentially and alternately executed;
>
> and
>
> said control unit causes executes a time period associated with said first period of time based on whether time periods associated with said second period of time and time periods associated with said third period of time have been sequentially and alternately executed a predetermined number of times,

as recited in amended independent claim 8. Therefore, amended claim 8 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

None of Padovani et al., Yli-Kotila et al., or Reed discuss or suggest:

> determining whether time periods associated with said second period of time and time periods associated with said third period of time have been sequentially and alternately executed a predetermined number of times;
>
> and
>
> executing a time period associated with said first period of time based on whether time periods associated with said second period of time and time periods associated with said third period of time have been sequentially and alternately executed said predetermined number of times,

as recited in amended independent claim 11. Therefore, amended claim 11 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

IV. New Claim

New claim 12 has been added. None of the prior art cited by the Examiner discusses or suggests:

> time periods associated with said second period of time and time periods associated with said third period of time are sequentially and alternately executed;
>
> and
>
> time periods associated with said second period of time and time periods associated with said third period of time are sequentially and alternately executed a predetermined number of times and a time period associated with said first period of time is subsequently executed,

as recited in new claim 12. Therefore, claim 12 patentably distinguishes over the references relied upon. Thus, it is submitted that new claim 12 is in a condition suitable for allowance.

CONCLUSION

Claims 1, 5-6, and 8-12 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

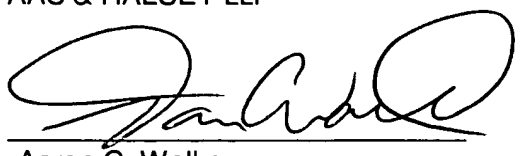
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 1-31-07

By: 

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